

### **Amendments to the Specification**

Please replace the paragraph starting at page 14, line 3 with the following amended paragraph.

Thus, one embodiment of determining system capacity includes forming a ratio of the number of measurements having an RNR below a threshold (for example, 3dB) to the total number of measurements. Preferably, only measurements corresponding to those where the number of active users is at or below a specific number are used. The ratio then represents a measure of the probability that the RNR will be below the threshold when the number of active users does not exceed the specific number. If the ratio is acceptable, then the number of active users (and hence the number of measurements used to form the ratio~~-ratio~~) is increased until the probability is unacceptably low. System capacity is therefore the greatest number of users that results in an acceptable probability, or one that is within the defined confidence interval.

Please replace the paragraph starting at page 16, line 19 with the following amended paragraph.

The laptop computer is preferably configured using the Agilent BOAT software application (Agilent E6474A), by first selecting the “auto config” to locate the connected hardware. The software is then configured to perform the preferred measurements by selecting the measurements tab, and the “add” button at the bottom of the menu. Under measurement type, “GPS” is selected (to ensure correct PN identification), and the add GPS in the description field. Then select “add” from the bottom menu and select “Boat” for measurement type. Choose “PCS receiver” for hardware and name the device “Boat” in the description field. Several checkboxes should be modified before saving this measurement. First select “Top N” under measurement type, and select “Code Domain Trace” and “Code Domain Stats”. Type the number 1 in the “Top N” box. Only one PN is needed for this test thus this configuration is for a unique PN. The PN increment should be set to 1, and the carrier tracking should be selected from the “other” configuration box. The carrier tracking option should not be selected for this test. The Pilot dominance should be set to 10dB, the Freq. Units should be set to channel, and the band should be set to down link because the forward link data is being collected from the base station. The Carrier should be set to Channel 350 (or appropriate channel for test). The configuration should now be saved. The forward link data obtained in a given measurement is ~~deppicted~~depicted in Figure 6, which shows the code domain along the horizontal axis, and the power level along the vertical axis. The power level of each individual Walsh code is measured and stored.